

Hyungjun Kim

List of Publications by Citations

Source: <https://exaly.com/author-pdf/1562700/hyungjun-kim-publications-by-citations.pdf>
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

130 papers	6,009 citations	41 h-index	74 g-index
136 ext. papers	7,672 ext. citations	11.6 avg, IF	6.14 L-index

#	Paper	IF	Citations
130	Tuning selectivity of electrochemical reactions by atomically dispersed platinum catalyst. <i>Nature Communications</i> , 2016 , 7, 10922	17.4	509
129	Achieving Selective and Efficient Electrocatalytic Activity for CO ₂ Reduction Using Immobilized Silver Nanoparticles. <i>Journal of the American Chemical Society</i> , 2015 , 137, 13844-50	16.4	437
128	Reversible and cooperative photoactivation of single-atom Cu/TiO photocatalysts. <i>Nature Materials</i> , 2019 , 18, 620-626	27	275
127	Long-range electron transfer over graphene-based catalyst for high-performing oxygen reduction reactions: importance of size, N-doping, and metallic impurities. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9070-7	16.4	256
126	Highly Efficient, Selective, and Stable CO ₂ Electroreduction on a Hexagonal Zn Catalyst. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 9297-300	16.4	227
125	The AchillesSheel of iron-based catalysts during oxygen reduction in an acidic medium. <i>Energy and Environmental Science</i> , 2018 , 11, 3176-3182	35.4	208
124	Facile CO ₂ Electro-Reduction to Formate via Oxygen Bidentate Intermediate Stabilized by High-Index Planes of Bi Dendrite Catalyst. <i>ACS Catalysis</i> , 2017 , 7, 5071-5077	13.1	182
123	Effect of NaBH ₄ on properties of nanoscale zero-valent iron and its catalytic activity for reduction of p -nitrophenol. <i>Applied Catalysis B: Environmental</i> , 2016 , 182, 541-549	21.8	167
122	Embedding covalency into metal catalysts for efficient electrochemical conversion of CO ₂ . <i>Journal of the American Chemical Society</i> , 2014 , 136, 11355-61	16.4	157
121	Insight into Electrochemical CO ₂ Reduction on Surface-Molecule-Mediated Ag Nanoparticles. <i>ACS Catalysis</i> , 2017 , 7, 779-785	13.1	151
120	Induction and control of supramolecular chirality by light in self-assembled helical nanostructures. <i>Nature Communications</i> , 2015 , 6, 6959	17.4	128
119	Maximizing the catalytic function of hydrogen spillover in platinum-encapsulated aluminosilicates with controlled nanostructures. <i>Nature Communications</i> , 2014 , 5, 3370	17.4	117
118	Nitrite reduction mechanism on a Pd surface. <i>Environmental Science & Technology</i> , 2014 , 48, 12768-12774	14.3	105
117	Bifunctional 2D Superlattice Electrocatalysts of Layered Double Hydroxide//Transition Metal Dichalcogenide Active for Overall Water Splitting. <i>ACS Energy Letters</i> , 2018 , 3, 952-960	20.1	89
116	Roles of SnX (X = F, Cl, Br) Additives in Tin-Based Halide Perovskites toward Highly Efficient and Stable Lead-Free Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 6024-6031	6.4	88
115	Polymeric Carbon Nitride with Localized Aluminum Coordination Sites as a Durable and Efficient Photocatalyst for Visible Light Utilization. <i>ACS Catalysis</i> , 2018 , 8, 4241-4256	13.1	84
114	Ga-Doped Pt-Ni Octahedral Nanoparticles as a Highly Active and Durable Electrocatalyst for Oxygen Reduction Reaction. <i>Nano Letters</i> , 2018 , 18, 2450-2458	11.5	82

113	Redirecting dynamic surface restructuring of a layered transition metal oxide catalyst for superior water oxidation. <i>Nature Catalysis</i> , 2021 , 4, 212-222	36.5	80
112	Exfoliated 2D Lepidocrocite Titanium Oxide Nanosheets for High Sulfur Content Cathodes with Highly Stable LIB Battery Performance. <i>ACS Energy Letters</i> , 2018 , 3, 412-419	20.1	78
111	Tuned Chemical Bonding Ability of Au at Grain Boundaries for Enhanced Electrochemical CO ₂ Reduction. <i>ACS Catalysis</i> , 2016 , 6, 4443-4448	13.1	78
110	Anisotropic Shock Sensitivity of Cyclotrimethylene Trinitramine (RDX) from Compress-and-Shear Reactive Dynamics. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 10198-10206	3.8	64
109	Time-resolved observation of C ₁ coupling intermediates on Cu electrodes for selective electrochemical CO ₂ reduction. <i>Energy and Environmental Science</i> , 2020 , 13, 4301-4311	35.4	63
108	A General Strategy to Atomically Dispersed Precious Metal Catalysts for Unravelling Their Catalytic Trends for Oxygen Reduction Reaction. <i>ACS Nano</i> , 2020 , 14, 1990-2001	16.7	58
107	Activity Origin and Multifunctionality of Pt-Based Intermetallic Nanostructures for Efficient Electrocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 11242-11254	13.1	56
106	Ultrafast charge transfer coupled with lattice phonons in two-dimensional covalent organic frameworks. <i>Nature Communications</i> , 2019 , 10, 1873	17.4	55
105	Carbon Monoxide as a Promoter of Atomically Dispersed Platinum Catalyst in Electrochemical Hydrogen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2018 , 140, 16198-16205	16.4	55
104	Mixed Valence Perovskite Cs ₂ AuI ₃ : A Potential Material for Thin-Film Pb-Free Photovoltaic Cells with Ultrahigh Efficiency. <i>Advanced Materials</i> , 2018 , 30, e1707001	24	54
103	β-MnO Nanowire-Anchored Highly Oxidized Cluster as a Catalyst for Li-O Batteries: Superior Electrocatalytic Activity and High Functionality. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 15984-15989	16.4	54
102	Insight into the Microenvironments of the Metal/Ionic Liquid Interface during Electrochemical CO ₂ Reduction. <i>ACS Catalysis</i> , 2018 , 8, 2420-2427	13.1	52
101	Distorted Carbon Nitride Structure with Substituted Benzene Moieties for Enhanced Visible Light Photocatalytic Activities. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 40360-40368	9.5	50
100	Magnetotactic molecular architectures from self-assembly of β-peptide foldamers. <i>Nature Communications</i> , 2015 , 6, 8747	17.4	50
99	Synergistic interaction of Re complex and amine functionalized multiple ligands in metal-organic frameworks for conversion of carbon dioxide. <i>Scientific Reports</i> , 2017 , 7, 612	4.9	47
98	Laser-induced phase separation of silicon carbide. <i>Nature Communications</i> , 2016 , 7, 13562	17.4	47
97	Intermetallic PtCu Nanoframes as Efficient Oxygen Reduction Electrocatalysts. <i>Nano Letters</i> , 2020 , 20, 7413-7421	11.5	46
96	2D Covalent Metals: A New Materials Domain of Electrochemical CO Conversion with Broken Scaling Relationship. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4124-4129	6.4	45

95	Transfer and Dynamic Inversion of Coassembled Supramolecular Chirality through 2D-Sheet to Rolled-Up Tubular Structure. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17711-17714	16.4	43
94	The Mechanism of Room-Temperature Ionic-Liquid-Based Electrochemical CO ₂ Reduction: A Review. <i>Molecules</i> , 2017 , 22,	4.8	42
93	Phase Tuning of Nanostructured Gallium Oxide via Hybridization with Reduced Graphene Oxide for Superior Anode Performance in Li-Ion Battery: An Experimental and Theoretical Study. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18679-88	9.5	41
92	Universal Correction of Density Functional Theory to Include London Dispersion (up to Lr, Element 103). <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 360-3	6.4	41
91	A Conductive Hybridization Matrix of RuO ₂ Two-Dimensional Nanosheets: A Hybrid-Type Photocatalyst. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8546-50	16.4	41
90	Highly Efficient, Selective, and Stable CO ₂ Electroreduction on a Hexagonal Zn Catalyst. <i>Angewandte Chemie</i> , 2016 , 128, 9443-9446	3.6	41
89	Turning On MLCT Phosphorescence of Iridium(III) Borane Conjugates upon Fluoride Binding. <i>Organometallics</i> , 2012 , 31, 31-34	3.8	40
88	Zinc Phosphorus Complex Working as an Atomic Valve for Colloidal Growth of Monodisperse Indium Phosphide Quantum Dots. <i>Chemistry of Materials</i> , 2017 , 29, 6346-6355	9.6	39
87	Unveiling Electrode/Electrolyte Design-Based NO Reduction for NH ₃ Synthesis. <i>ACS Energy Letters</i> , 2020 , 5, 3647-3656	20.1	39
86	Identification of Single-Atom Ni Site Active toward Electrochemical CO Conversion to CO. <i>Journal of the American Chemical Society</i> , 2021 , 143, 925-933	16.4	39
85	High-performance p-channel transistors with transparent Zn doped-CuI. <i>Nature Communications</i> , 2020 , 11, 4309	17.4	38
84	Hydrogen Spillover in Encapsulated Metal Catalysts: New Opportunities for Designing Advanced Hydroprocessing Catalysts. <i>ChemCatChem</i> , 2015 , 7, 1048-1057	5.2	35
83	Solid Electrolyte Layers by Solution Deposition. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701328	4.6	35
82	A rational method to kinetically control the rate-determining step to explore efficient electrocatalysts for the oxygen evolution reaction. <i>NPG Asia Materials</i> , 2018 , 10, 659-669	10.3	35
81	Metal/Oxide Interfaces for Selective Electrochemical C-C Coupling Reactions. <i>ACS Energy Letters</i> , 2019 , 4, 2241-2248	20.1	34
80	Benchmarking several van der Waals dispersion approaches for the description of intermolecular interactions. <i>Journal of Chemical Physics</i> , 2018 , 148, 064112	3.9	33
79	Thermal Transformation of Molecular Ni ²⁺ /Ni ⁴⁺ Sites for Enhanced CO ₂ Electroreduction Activity. <i>ACS Catalysis</i> , 2020 , 10, 10920-10931	13.1	32
78	High-efficiency and high-power rechargeable lithium-sulfur dioxide batteries exploiting conventional carbonate-based electrolytes. <i>Nature Communications</i> , 2017 , 8, 14989	17.4	31

77	Band Gap Engineering of Cs ₃ Bi ₂ I ₉ Perovskites with Trivalent Atoms Using a Dual Metal Cation. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 969-974	3.8	31
76	Monolayered g-C ₃ N ₄ nanosheet as an emerging cationic building block for bifunctional 2D superlattice hybrid catalysts with controlled defect structures. <i>Applied Catalysis B: Environmental</i> , 2020 , 277, 119191	21.8	31
75	A hydro/oxo-phobic top hole-selective layer for efficient and stable colloidal quantum dot solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 2078-2084	35.4	31
74	Molecular Identification of Cr(VI) Removal Mechanism on Vivianite Surface. <i>Environmental Science & Technology</i> , 2018 , 52, 10647-10656	10.3	30
73	The Role of Confined Water in Ionic Liquid Electrolytes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 556-9	6.4	28
72	DFT Study of Water Adsorption and Decomposition on a Ga-Rich GaP(001)(2×4) Surface. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 17604-17612	3.8	27
71	Superior role of MXene nanosheet as hybridization matrix over graphene in enhancing interfacial electronic coupling and functionalities of metal oxide. <i>Nano Energy</i> , 2018 , 53, 841-848	17.1	27
70	Nitrate reduction on the surface of bimetallic catalysts supported by nano-crystalline beta-zeolite (NBeta). <i>Green Chemistry</i> , 2017 , 19, 853-866	10	26
69	A protocol to evaluate one electron redox potential for iron complexes. <i>Journal of Computational Chemistry</i> , 2013 , 34, 2233-41	3.5	26
68	Inner-sphere electron-transfer single iodide mechanism for dye regeneration in dye-sensitized solar cells. <i>Journal of the American Chemical Society</i> , 2013 , 135, 2431-4	16.4	26
67	Heterolayered 2D nanohybrids of uniformly stacked transition metal dichalcogenide/transition metal oxide monolayers with improved energy-related functionalities. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15237-15244	13	25
66	Selective electrochemical reduction of nitric oxide to hydroxylamine by atomically dispersed iron catalyst. <i>Nature Communications</i> , 2021 , 12, 1856	17.4	25
65	A mechanistic model for hydrogen activation, spillover, and its chemical reaction in a zeolite-encapsulated Pt catalyst. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 7035-41	3.6	24
64	Porous Metal-Organic Framework CUK-1 for Adsorption Heat Allocation toward Green Applications of Natural Refrigerant Water. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25778-25789	9.5	23
63	Effect of marine environmental factors on the phase equilibrium of CO ₂ hydrate. <i>International Journal of Greenhouse Gas Control</i> , 2014 , 20, 285-292	4.2	23
62	A Seamless Grid-Based Interface for Mean-Field QM/MM Coupled with Efficient Solvation Free Energy Calculations. <i>Journal of Chemical Theory and Computation</i> , 2016 , 12, 5088-5099	6.4	22
61	Activity-Stability Relationship in Nanoparticles for Electrocatalysis. <i>ACS Energy Letters</i> , 2020 , 5, 2827-2834	20.1	22
60	Dynamic metal-polymer interaction for the design of chemoselective and long-lived hydrogenation catalysts. <i>Science Advances</i> , 2020 , 6, eabb7369	14.3	21

59	Structure, Dynamics, and Wettability of Water at Metal Interfaces. <i>Scientific Reports</i> , 2019 , 9, 14805	4.9	21
58	First-Principles Design of Hydrogen Dissociation Catalysts Based on Isoelectronic Metal Solid Solutions. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1819-24	6.4	21
57	uMBD: A Materials-Ready Dispersion Correction That Uniformly Treats Metallic, Ionic, and van der Waals Bonding. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2346-2354	16.4	21
56	High-temperature high-pressure phases of lithium from electron force field (eFF) quantum electron dynamics simulations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 15101-5	11.5	20
55	Electric Field Mediated Selectivity Switching of Electrochemical CO ₂ Reduction from Formate to CO on Carbon Supported Sn. <i>ACS Energy Letters</i> , 2020 , 5, 2987-2994	20.1	20
54	Rapid Dye Regeneration Mechanism of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4285-90	6.4	19
53	Electrochemical Evidence for Two Sub-families of Fe _N xCy Moieties with Concentration-Dependent Cyanide Poisoning. <i>ChemElectroChem</i> , 2018 , 5, 1880-1885	4.3	18
52	Selective Dissociation of Dihydrogen over Dioxygen on a Hindered Platinum Surface for the Direct Synthesis of Hydrogen Peroxide. <i>ChemCatChem</i> , 2014 , 6, 2836-2842	5.2	18
51	Multiscale Simulation Method for Quantitative Prediction of Surface Wettability at the Atomistic Level. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 1750-1758	6.4	17
50	Synergistic Control of Structural Disorder and Surface Bonding Nature to Optimize the Functionality of Manganese Oxide as an Electrocatalyst and a Cathode for Li-O Batteries. <i>Small</i> , 2020 , 16, e1903265	11	17
49	FexNi ₂ BP Alloy Nanocatalysts with Electron-Deficient Phosphorus Enhancing the Hydrogen Evolution Reaction in Acidic Media. <i>ACS Catalysis</i> , 2020 , 10, 11665-11673	13.1	16
48	Lattice Engineering to Simultaneously Control the Defect/Stacking Structures of Layered Double Hydroxide Nanosheets to Optimize Their Energy Functionalities. <i>ACS Nano</i> , 2021 , 15, 8306-8318	16.7	16
47	New Features and Uncovered Benefits of Polycrystalline Magnetite as Reusable Catalyst in Reductive Chemical Conversion. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 25195-25205	3.8	15
46	Recent development of atom-pairwise van der waals corrections for density functional theory: From molecules to solids. <i>International Journal of Quantum Chemistry</i> , 2016 , 116, 598-607	2.1	15
45	Polymorphic Phase Control Mechanism of Organic-Inorganic Hybrid Perovskite Engineered by Dual-Site Alloying. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9508-9515	3.8	14
44	Highly selective adsorption of p-xylene over other C aromatic hydrocarbons by Co-CUK-1: a combined experimental and theoretical assessment. <i>Dalton Transactions</i> , 2017 , 46, 16096-16101	4.3	14
43	Understanding the relative efficacies and versatile roles of 2D conductive nanosheets in hybrid-type photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2019 , 257, 117875	21.8	14
42	Selectivity Modulated by Surface Ligands on Cu ₂ O/TiO ₂ Catalysts for Gas-Phase Photocatalytic Reduction of Carbon Dioxide. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 29184-29191	3.8	14

41	Electronic interaction between transition metal single-atoms and anatase TiO ₂ boosts CO ₂ photoreduction with H ₂ O. <i>Energy and Environmental Science</i> ,	35.4	14
40	On the importance of the electric double layer structure in aqueous electrocatalysis.. <i>Nature Communications</i> , 2022 , 13, 174	17.4	13
39	Thermodynamics of Multicomponent Perovskites: A Guide to Highly Efficient and Stable Solar Cell Materials. <i>Chemistry of Materials</i> , 2020 , 32, 4265-4272	9.6	13
38	Theoretical and experimental studies of the dechlorination mechanism of carbon tetrachloride on a vivianite ferrous phosphate surface. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 5714-22	2.8	12
37	Cluster Expansion Method for Simulating Realistic Size of Nanoparticle Catalysts with an Application in CO ₂ Electroreduction. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9245-9254	3.8	12
36	Experimental and Density Functional Theory Corroborated Optimization of Durable Metal Embedded Carbon Nanofiber for Oxygen Electrocatalysis. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3109-3114	6.4	11
35	Enthalpy-Entropy Interplay in π -Stacking Interaction of Benzene Dimer in Water. <i>Journal of Chemical Theory and Computation</i> , 2019 , 15, 1538-1545	6.4	10
34	Effect of groundwater ions (Ca, Na, and HCO) on removal of hexavalent chromium by Fe(II)-phosphate mineral. <i>Journal of Hazardous Materials</i> , 2020 , 398, 122948	12.8	10
33	Operando Stability of Platinum Electrocatalysts in Ammonia Oxidation Reactions. <i>ACS Catalysis</i> , 2020 , 10, 11674-11684	13.1	10
32	Failure of Density Functional Dispersion Correction in Metallic Systems and Its Possible Solution Using a Modified Many-Body Dispersion Correction. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 3278-83	6.4	10
31	Impacts of cation ordering on bandgap dispersion of double perovskites. <i>APL Materials</i> , 2018 , 6, 084903	5.7	10
30	Light Emission Enhancement by Tuning the Structural Phase of APbBr (A = CH ₃ NH ₂ , Cs) Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2135-2142	6.4	9
29	Prediction of the reduction potential of tris(2,2'-bipyridinyl)iron(III/II) derivatives. <i>Journal of Computational Chemistry</i> , 2015 , 36, 33-41	3.5	8
28	Wall-mediated self-diffusion in slit and cylindrical pores. <i>Physical Review E</i> , 2008 , 77, 031202	2.4	8
27	Hydration Thermodynamics of Non-Polar Aromatic Hydrocarbons: Comparison of Implicit and Explicit Solvation Models. <i>Molecules</i> , 2018 , 23,	4.8	8
26	Simultaneous Enhanced Efficiency and Stability of Perovskite Solar Cells Using Adhesive Fluorinated Polymer Interfacial Material. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 35595-35605	9.5	8
25	Electronic Structure and Band Alignments of Various Phases of Titania Using the Self-Consistent Hybrid Density Functional and DFT+ Methods. <i>Frontiers in Chemistry</i> , 2019 , 7, 47	5	7
24	Ligand-Controlled Direct Hydroformylation of Trisubstituted Olefins. <i>Organic Letters</i> , 2019 , 21, 5789-5792	9.2	7

23	Self-Assembly of a β -Peptide Foldamer: The Role of the Surfactant in Three-Dimensional Shape Selection. <i>ChemPlusChem</i> , 2019 , 84, 481-487	2.8	7
22	Spectroscopic capture of a low-spin Mn(IV)-oxo species in Ni-MnO nanoparticles during water oxidation catalysis. <i>Nature Communications</i> , 2020 , 11, 5230	17.4	7
21	Tailoring a Dynamic Metal-Polymer Interaction to Improve Catalyst Selectivity and Longevity in Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 12482-12489	16.4	7
20	DYNAMICS OF SIMPLE FLUIDS CONFINED IN CYLINDRICAL PORE: EFFECT OF PORE SIZE. <i>Journal of Theoretical and Computational Chemistry</i> , 2005 , 04, 305-315	1.8	6
19	Probing Distinct Fullerene Formation Processes from Carbon Precursors of Different Sizes and Structures. <i>Analytical Chemistry</i> , 2016 , 88, 8232-8	7.8	6
18	Dynamic Transformation of a Ag-Coordinated Supramolecular Nanostructure from a 1D Needle to a 1D Helical Tube via a 2D Ribbon Accompanying the Conversion of Complex Structures. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3113-3123	16.4	6
17	First-Principles Studies on Twinnability of Magnesium Alloys: Effects of Yttrium and Lithium on $\{10\bar{1}1\}$ and $\{10\bar{1}2\}$ Compression Twinning Deformation Processes. <i>Metals and Materials International</i> , 2018 , 24, 720-729	2.4	5
16	β -MnO ₂ Nanowire-Anchored Highly Oxidized Cluster as a Catalyst for Li-O ₂ Batteries: Superior Electrocatalytic Activity and High Functionality. <i>Angewandte Chemie</i> , 2018 , 130, 16216-16221	3.6	4
15	Reversible Ligand Exchange in Atomically Dispersed Catalysts for Modulating the Activity and Selectivity of the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 20528-20534	16.4	4
14	Multilayer Conductive Hybrid Nanosheets as Versatile Hybridization Matrices for Optimizing the Defect Structure, Structural Ordering, and Energy-Functionality of Nanostructured Materials. <i>Advanced Science</i> , 2021 , e2103042	13.6	3
13	Microbially Guided Discovery and Biosynthesis of Biologically Active Natural Products. <i>ACS Synthetic Biology</i> , 2021 , 10, 1505-1519	5.7	3
12	Exfoliated Metal Oxide Nanosheets as Effective and Applicable Substrates for Atomically Dispersed Metal Nanoparticles with Tailorable Functionalities. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600661	4.6	3
11	Water Slippage on Graphitic and Metallic Surfaces: Impact of the Surface Packing Structure and Electron Density Tail. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 11392-11400	3.8	2
10	Physicochemical Understanding of the Impact of Pore Environment and Species of Adsorbates on Adsorption Behaviour. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 20504-20510	16.4	2
9	Density functional theory in classical explicit solvents: Mean-field QM / MM method for simulating solid-liquid interfaces. <i>Bulletin of the Korean Chemical Society</i> ,	1.2	1
8	Femtosecond Quantum Dynamics of Excited-State Evolution of Halide Perovskites: Quantum Chaos of Molecular Cations. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 10676-10684	3.8	1
7	Solid Electrolyte: Solid Electrolyte Layers by Solution Deposition (Adv. Mater. Interfaces 8/2018). <i>Advanced Materials Interfaces</i> , 2018 , 5, 1870035	4.6	1
6	Assessment and prediction of band edge locations of nitrides using a self-consistent hybrid functional. <i>Journal of Chemical Physics</i> , 2021 , 155, 024120	3.9	1

- | | | | |
|---|---|------|---|
| 5 | Triphasic Metal Oxide Photocatalyst for Reaction Site-Specific Production of Hydrogen Peroxide from Oxygen Reduction and Water Oxidation. <i>Advanced Energy Materials</i> , 2104052 | 21.8 | 1 |
| 4 | Reversible Ligand Exchange in Atomically Dispersed Catalysts for Modulating the Activity and Selectivity of the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2021 , 133, 20691-20697 | 3.6 | 0 |
| 3 | Electrocatalysts: Synergistic Control of Structural Disorder and Surface Bonding Nature to Optimize the Functionality of Manganese Oxide as an Electrocatalyst and a Cathode for LiO ₂ Batteries (Small 12/2020). <i>Small</i> , 2020 , 16, 2070062 | 11 | |
| 2 | Tailoring a Dynamic MetalPolymer Interaction to Improve Catalyst Selectivity and Longevity in Hydrogenation. <i>Angewandte Chemie</i> , 2021 , 133, 12590-12597 | 3.6 | |
| 1 | Probing Surface Chemistry at an Atomic Level: Decomposition of 1-Propanethiol on GaP(001) (2-4) Investigated by STM, XPS, and DFT. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 2964-2972 | 3.8 | |